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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,445	06/29/2001	Yoshifusa Togawa	122.1222RE	6318

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EXAMINER	
ELISCA, PIERRE E	

ART UNIT	PAPER NUMBER
3714	

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04/15/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/893,445	TOGAWA ET AL.	
	Examiner	Art Unit	
	Pierre E. Elisca	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/10/2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *67,75,79,84,94,109 and 145-156* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *67,75,79,84,94,109 and 145-156* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Applicant's amendment filed on 12/10/2009.

2. Claims 67, 75, 79, 84, 94, 109 and 145-153 remain pending and have been examined. Claims 154-156 have been added.

Claim Rejections - 35 USC § 102

3. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 67, 75, 79, 84, 94, 109 and 145-156 are rejected under 35 U.S.C. 102 (e) as being anticipated by Cozza (U.S. Pat. No. 5,502,815).

As per claims 67, 75, 79, 84, 94, 109 and 145-156 Arnold discloses a method/apparatus for increasing the speed at which computer viruses are detected stores initial state information concerning the file or volume which is being examined for a virus. This information is stored in a cache in a non-volatile storage medium and when files are

subsequently scanned for viruses, the current state information is compared to the initial state information stored in the cache. Please note that the file can be infected with virus or without virus, the system comprising:

A virus scanner scanning a file stored in a storage device for infection with a virus, a quarantining device quarantining the file from non-infected filed on the storage device, when the file is infected (see., abstract, col 1-col 5. Please note that the limitation of quarantining the file is readable as isolating the infected virus see., Arnold in col 7, lines 3-8, specifically wherein said if one or more decoy programs is subsequently found to have changed from the original, protected version, it can be assumed that the changes are due to a virus. A comparison of each modified decoy program with its corresponding uninfected version enables a copy of the virus to be isolated from each decoy).

Applicant's newly added limitation of converting device converting the quarantined file into encoded data is also disclosed by Arnold in col 1, lines 45-63, specifically wherein said converting the binary machine code of the virus (or infected virues) to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus like..).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 67, 75, 79, 84, 94, 109 and 145-156 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Arnold et al. (U.S. Pat. No. 5,440,723) in view of Cozza (U.S. Pat. No. 5,502,815).

As per claims 67, 75, 79, 84, 94, 109 and 145-156 Arnold discloses a periodic monitoring of a data processing system for anomalous behavior that may indicate the presence of an undesirable software entity such as a computer virus (which is readable as Applicant's claimed invention wherein said a data processing system which has the ability to deal with infection of a file with a virus), the system comprising:
A storage device storing files (see., abstract, fig 1A, items 24 and 26, col 3, lines 49-68);
A virus scanner detecting if a file stored in said storage device is infected with a virus (see., col 1, lines 45-68, col 2, lines 1-11, col 5, lines 29-45); and the limitation of converting device converting the quarantined file into encoded data when the infected file is detected is also disclosed by Arnold in col 1, lines 45-63, specifically wherein said converting the binary machine code of the virus (or infected virues) to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus like..).

Arnold fails to explicitly disclose the limitation wherein said saving or storing a detected virus-infected file into a specific area within said storage device. However, Cozza a method/apparatus for increasing the speed at which computer viruses are detected stores initial state information concerning the file or volume which is being examined for a virus. This information is stored in a cache in a non-volatile storage medium and when files are subsequently scanned for viruses, the current state information is compared to

the initial state information stored in the cache (see., abstract, col 1-col 5. Please note that the file can be infected with virus or without virus). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the computer virus of Arnold by including the limitation detailed above as taught by Cozza because this would increase the speed at which a computer can scan for the presence of a computer virus.

RESPONSE TO ARGUMENTS

8. Applicant's arguments with respect to claims 67, 75, 79, 84, 94, 109 and 145-156 have been fully considered but they are not persuasive.

REMARKS

9. In response to Applicant's arguments filed on 12/10/2009, Applicant continues to argue that:

a. Arnold discusses converting a part of the virus code to a human recognizable assembler for producing a signature. Whereas claims 67, 75, 79, 84, 94 and 109 call for converting "an infected file" into another encoded data. However, it is the Examiner's principal position that Arnold discloses this limitation in col 1, lines 45-63, **specifically wherein said converting the binary machine code of the virus (or infected virues) to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus like..).**

b. Applicant further argues that the prior art of record (Arnold and Cozza) fail to disclose the limitation of saving a detected virus. As indicated above, Cozza discloses this limitation in col 4, lines 59-67, fig 4, step 60, the detected virus is stored **or saved** in a cache in a non-volatile storage medium. Also, Arnold discloses an automatic scanning for occurrences of known types of undesirable software entities and taking remedial action if they are discovered. Therefore, the detected virus is stored in a signature database, see., Arnold, abstract.

NOTE

10. Applicant is advised to incorporate the security concept of his invention into the claims in order to expedite prosecution.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 571 272 6706. The examiner can normally be reached on 6:30 to 5:00. Hoteler.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571 272 4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pierre E. Elisca/
Primary Examiner, Art Unit 3714